

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): A progressive multifocal lens for correcting eyesight comprising:
  - ~~having a progressive refracting interface, said in a progressive refracting interface is~~
  - located on the a side of an eyeball or a refracting interface on the a side of an object,
  - wherein the progressive refracting interface including comprises:
    - a distance portion, ~~and~~
    - a near portion with different refractive powers, and
    - a progressive portion of which refractive power varies progressively
  - therebetween,
  - ~~wherein the progressive multifocal lens is characterized in that the eyeball-side refracting~~
  - ~~interface or the object-side refracting interface is a combined refracting interface composed of~~
  - comprising an original progressive refracting interface set only to exhibit a desired eyesight
  - corrective characteristic and an original toric surface set only to exhibit a desired astigmatism
  - corrective characteristic, ~~and~~
  - wherein, when ~~the~~ z-axis is an axis passing through the center of the progressive
  - refracting interface from the object toward the eyeball, ~~the~~ x-axis is ~~the~~ cylinder axis of the
  - original toric surface, and ~~the~~ y-axis is an axis perpendicular to the x-axis and the z-axis, value  $z_p$

in any point P ( $x_p$ ,  $y_p$ ,  $z_p$ ) in the combined refracting interface is expressed by a first expression (1) or a second expression (2) by using ~~the~~ approximate curvature  $C_p$  of the original progressive refracting interface, curvature  $C_x$  in the x-axis direction, and curvature  $C_y$  in the y-axis direction,

wherein the first expression (1) is expressed as ~~[Numerical Formula 1]~~

$$z_p = \frac{(c_p + c_x)x^2 + (c_p + c_y)y^2}{\sqrt{1 - \frac{((c_p + c_x)x^2 + (c_p + c_y)y^2)^2}{x^2 + y^2}}} \rightarrow \dots (1) \text{ and}$$

wherein the second expression (2) is expressed as

~~[Numerical Formula 2]~~

$$z_p = \frac{(c_p + c_x)x^2}{1 + \sqrt{1 - (c_p + c_x)^2(x^2 + y^2)}} + \frac{(c_p + c_y)y^2}{1 + \sqrt{1 - (c_p + c_y)^2(x^2 + y^2)}} \rightarrow \dots (2)$$

2. (currently amended) A progressive multifocal lens according to claim 1, ~~characterized~~  
~~in that~~ wherein an ~~the~~ eyeball-side refracting interface surface or ~~the~~ an object-side refracting  
interface surface opposite to the surface having the combined refracting interface is spherical or  
rotation-symmetry aspherical in shape.

3. (currently amended) A method for designing a progressive multifocal lens for  
correcting eyesight having a progressive refracting interface ~~in a refracting interface on the~~ a side  
of an eyeball or on a side ~~a refracting interface on the side~~ of an object, the progressive refracting  
interface ~~including~~ comprising a distance portion, ~~and~~ a near portion with different refractive

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powers, and a progressive portion of which refractive power varies progressively therebetween,  
~~wherein the method is characterized by comprising:~~

~~a first step of obtaining an original progressive refracting interface only in order that the~~  
~~eyeball-side refracting interface or the object-side refracting interface exhibits an eyesight~~  
~~corrective characteristic;~~

~~a second step of obtaining an original toric surface only in order that the eyeball-side~~  
~~refracting interface or the object-side refracting interface exhibits a desired astigmatism-~~  
~~corrective-characteristic;~~ and

~~a third step of obtaining a combined refracting interface as the eyeball-side refracting~~  
~~interface or the object-side refracting interface, the combined refracting interface being~~  
~~composed of comprising the original progressive refracting interface set only to exhibit a desired~~  
~~eyesight corrective characteristic and the original toric surface set only to exhibit a desired~~  
~~astigmatism corrective characteristic,~~

~~-wherein in the third step obtaining of the combined refracting interface, when the z-axis~~  
~~is an axis passing through the center of the progressive refracting interface from the object~~  
~~toward the eyeball, the x-axis is the cylinder axis of the original toric surface, and the y-axis is an~~  
~~axis perpendicular to the x-axis and the z-axis, value  $z_p$  in any point  $P(x_p, y_p, z_p)$  in the combined~~  
~~refracting interface is obtained by a first expression (1) or a second expression (2) by using the~~  
~~an approximate curvature  $C_p$  of the original progressive refracting interface, a curvature  $C_x$  in~~  
~~the x-axis direction, and a curvature  $C_y$  in the y-axis direction,~~

wherein the first expression (1) is expressed as [Numerical Formula 3]

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$$z_p = \frac{(c_p + c_x)x^2 + (c_p + c_y)y^2}{\sqrt{1 - \frac{((c_p + c_x)x^2 + (c_p + c_y)y^2)^2}{x^2 + y^2}}} \quad (1)$$

[Numerical Formula 4] wherein the second expression (2) is expressed as

$$z_p = \frac{(c_p + c_x)x^2}{1 + \sqrt{1 - (c_p + c_x)^2(x^2 + y^2)}} + \frac{(c_p + c_y)y^2}{1 + \sqrt{1 - (c_p + c_y)^2(x^2 + y^2)}} \quad (2)$$

4. (new): The progressive multifocal lens according to claim 1, wherein, the value  $z_p$  in any point P ( $x_p, y_p, z_p$ ) in the combined refracting interface is expressed by the second expression (2).

5. (new): The progressive multifocal lens according to claim 1, wherein the object-side has the combined refracting interface and the eyeball-side surface is spherical in shape.

6. (new): The progressive multifocal lens according to claim 1, wherein an eyeball-side refracting interface surface or an object-side refracting interface surface opposite to the surface having the combined refracting interface is rotation-symmetry aspherical in shape.

7. (new): The method for designing a progressive multifocal lens according to claim 3, wherein the original toric surface is obtained by a third expression expressed as:

$$z = \frac{c_x x^2 + c_y y^2}{1 + \sqrt{1 - \frac{(c_x x^2 + c_y y^2)^2}{x^2 + y^2}}}, \text{ wherein } z \text{ represents a circular arc of the original toric surface.}$$

8. (new): The method for designing a progressive multifocal lens according to claim 3, wherein the original toric surface is obtained by a fourth expression expressed as:

$$z = \frac{c_x x^2}{1 + \sqrt{1 - c_x^2 (x^2 + y^2)}} + \frac{c_y y^2}{1 + \sqrt{1 - c_y^2 (x^2 + y^2)}}, \text{ wherein } z \text{ represents a circular arc of the}$$

original toric surface.